



U.S. Department of Energy

Categorical Exclusion Determination Form

Submit by E-mail

Proposed Action Title: Tucson to Apache 115-kV Transmission Line Wood Pole Replacement Project

Program or Field Office: Western Area Power Administration, Desert Southwest Region

Location(s) (City/County/State): Pima and Cochise Counties, Arizona

Proposed Action Description:

Western Area Power Administration (Western) proposes to conduct pole replacements, access road improvements, and vegetation management along portions of the Tucson to Apache (TUC-APE) 115-kV transmission line in Pima and Cochise counties, Arizona (Figure 1). The transmission line is approximately 80 miles long and runs from the Tucson Substation near the intersection of Grant and Flowing Wells roads in Tucson, Pima County, to the Apache Substation on the west side of US 191 south of Cochise, Cochise County, Arizona. The transmission line corridor crosses lands owned or managed by the Arizona State Land Department (ASLD), Tohono O'odham Nation (TON), Bureau of Land Management (BLM), U.S. Forest Service (USFS), Pima County, Cochise County, and private lands. Poles selected for this replacement project are located on lands managed by ASLD, TON, Pima County, or that are privately owned. No project activities will occur on lands managed by either the BLM or the USFS.

A total of 149 wood H-frame structures along the TUC-APE 115-kV transmission line have not met safety inspection criteria for structural integrity. In addition, vegetation between structures 55-5 and 55-7 near the San Pedro River in Benson, Cochise County, Arizona, has grown to within an unsafe distance of the transmission line conductors. The purpose of the proposed project is to replace failed wood poles in-kind and manage vegetation in the identified segment to ensure continuous and safe operation of the bulk transmission system.

SEE CONTINUATION SHEET

Categorical Exclusion(s) Applied:

B1.3 - Routine maintenance

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of [10 CFR Part 1021](#).

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

☒ The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D.

To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

☒ There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal.

☒ The proposal has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

NEPA Compliance Officer:

Kondh Marimuthu

Date Determined:

2-28-13

Tucson-Apache 115-kV Transmission Line
Wood Pole Replacement Project, Pima and Cochise Counties, Arizona
Categorical Exclusion Continuation Sheet

Project Description (Continued)

A total of 149 wood H-frame structures will be replaced on the TUC-APE 115-kV transmission line. Wood poles will be replaced in-kind and in the original pole locations (i.e., no poles will be offset). Pole replacement work will be accomplished using rubber tire and track-type heavy equipment, F-550, F-350, F-250 line crew trucks, and equipment trailers. Work will be conducted within a maximum 50-foot radius of each of the 149 structures. All project-related access will be along existing access roads. No new road construction will occur; however, about 20 disjunct miles of access road will require improvements. Roads will be improved by measures such as grading to remove existing vegetation and permit all-weather access; surfacing; and installation of erosion-control features, low water crossings, and water diversions (such as rolling drain dips and water bars). A tractor dozer and pick-up trucks would be used for these improvements. Access roads typically measure between 12 feet and 16 feet wide; all improvements will be limited to within 10 feet of the existing road prism.

Western proposes to conduct vegetation management work between poles 55-5 and 55-7 (about 1,650 linear feet), over and adjacent to the San Pedro River. Work along this segment of the project area would be accomplished by walking crews into the work areas and avoiding the wetted portion of the channel to hand cut trees and lop and scatter debris. About three acres of vegetation would be cut to the ground between poles 55-5 and 55-7.

Project work is anticipated to begin no sooner than March 1, 2013, and will be completed in phases over a two-year period.

Special Conditions

1) GENERAL CONDITIONS

- a) *Limited disturbance area*: Limit the mechanical disturbance of previously undisturbed desertscrub habitat (including soils) to the greatest extent practicable. Avoid removing snags and deadfall. Wherever feasible, confine work areas to existing graded areas, such as roadways, turnouts, and similar disturbed areas. If clearing is required, leave small piles of brush in intervals to enhance habitat.
- b) *Alternative Access*: Western will evaluate alternative routes to access poles in the vicinity of the river corridors discussed above (Santa Cruz, San Pedro, Davidson Canyon, Cienega Creek), to avoid crossing the river channel at grade.
- c) *Sedimentation and water quality*: Best Management Practices will be applied as appropriate at any work site to control erosion and sedimentation and to prevent adverse impacts to offsite, downstream water quality.

- d) *Wetted channel avoidance*: Maintenance vehicles and related equipment will avoid crossing any wetted channel (any river or wash channel with running water). Vegetation will not be felled into a wetted channel.
- e) *Waters of the U.S.*: No work will occur between poles 19-2 and 19-5, or between poles 24-6 and 26-4, until a Preconstruction Notification has been submitted to the Army Corps of Engineers. Western Environmental shall issue internal Notice to Proceed (NTP) for these sections once approval has been received from the Corps.

2) BIOLOGICAL RESOURCES

- a) *Saguaros and agaves*: Saguaros and agaves will be left in place and undisturbed wherever possible. Saguaros will be topped as opposed to removing the entire plant wherever possible. Small saguaros (less than 10 feet tall) and agave which cannot be avoided will be replanted outside of the impact area.
- b) *Biological Monitor*: Due to the possibility that Pima pineapple cactus (PPC) or desert tortoise may be found within the project area, a Biological Monitor will be present during all project activities that have potential to disturb soil, vegetation, and wildlife in the desertscrub portions of the alignment (generally from the west end of the project at pole 2-5 to Davidson Canyon at pole 34-1). The Biological Monitor's responsibilities will include, but will not be limited to (1) inspection of locations of any tortoise burrows or sign, or active bird nests that were located during the pre-construction survey (see below); (2) monitoring potential activity of these species in the project area; (3) regular inspection of the work areas, and other areas related to project activities, for desert tortoise; and (4) regular inspection beneath vehicles and equipment to ensure that they do not present potential hazards to wildlife, including desert tortoises. The Biological Monitor will be authorized by Western to temporarily halt project activity if needed to prevent potential harm to PPC, desert tortoise, or native nesting birds. The work supervisor will coordinate with the Biological Monitor on planned or ongoing activities in desertscrub habitat and any specific monitoring requirements for each activity in those areas.
- c) *Pre-construction clearance survey*: No more than 7 days prior to project activities at all locations, a Biological Monitor will survey the project areas, including transmission line structures and associated work sites (e.g., equipment staging areas) for native nesting birds including burrowing owls, and desert tortoise burrows, within their respective habitats. The Biological Monitor will provide these survey results in a memo to Western prior to the onset of project activities, with any appropriate recommendations to avoid or minimize impacts to these resources.
- d) *Desert tortoise*: The Biological Monitor and all workers will regularly observe the work areas within desertscrub habitat for desert tortoise (generally from the west end of the project at pole 2-5 to Davidson Canyon at pole 34-1). If at any time tortoise are seen within or near any work area, the Biological Monitor and project supervisor will be immediately notified; project activities will stop and the tortoise will be allowed to move away on its own or be moved

(following the AGFD handling guidelines) out of harm's way to adjacent habitat. Anyone moving tortoise shall strictly adhere to AGFD's *Guidelines for Handling Sonoran Desert Tortoises*.

- e) *Nesting birds*: To avoid disturbance to nesting birds, project activities will be scheduled between September 1 and December 31, as feasible. Project activities taking place between January 1 and August 31 will be subject to pre-construction surveys by the Biological Monitor prior to beginning work. Project activities may not disturb an active bird nest. If an active bird nest is located on or adjacent to the project area, the Biological Monitor (above) will designate and flag an appropriate buffer area around the nest where activities will not be permitted. The buffer area will be based on the bird species and nature of project activity.
- f) *Worker training*: The Biological Monitor or Western will conduct employee training to ensure that all workers on the project site (including contractors and supply/equipment delivery drivers) are aware of all applicable avoidance measures for biological resources. Specifically, workers will be required to (1) limit all activities to approved and marked areas; (2) check beneath and around vehicles and equipment before moving them; (3) report any desert tortoise or bird nest observation in the project area to the supervisor or Biological Monitor; (4) pick up and properly dispose of any food, trash, or project-related refuse; and (5) report any spilled materials (oil, fuel, solvent, engine coolant, raw concrete, or other material potentially hazardous to wildlife) to the supervisor or Biological Monitor. In addition, all workers will be informed of civil and criminal penalties for violations of the federal ESA, the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act.
- g) *Animals*: No pets will be permitted on the work site. Workers will not be permitted to feed, harm, or handle wildlife at any time, except to move animals out of harm's way, and only as directed by a supervisor. This condition will not exempt workers, including the Biological Monitor, from any Western safety policy with regard to venomous reptiles.
- h) *Trash, refuse, concrete, and other materials*: All trash and food materials will be properly contained within vehicles or closed refuse bins while on the site, and will regularly be removed from the site (at least on a weekly basis) for proper disposal. All personal and project-related refuse will be removed from the site upon completion of project activities. No raw cement/concrete or washings thereof, asphalt, paint, oil, solvents, or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, shall be disposed of on-site or allowed to spill onto soil. Cleanup of any spilled material shall begin immediately.
- i) *Avoid wildlife hazards or attractants*: No potential wildlife pitfalls (e.g., trenches, bores, temporary detention basins, and other excavations) will be left uncovered. If covering or backfilling are not feasible, excavations shall be sloped at 3:1 at the ends to provide wildlife escape ramps, or fully enclosed with safety / wildlife exclusion fencing. All open trenches, bores, temporary detention basins, and other excavations shall be inspected periodically throughout the day and at the end of each workday. Any wildlife encountered during the course of project activities shall be allowed to leave the project area unharmed.

- j) *Minimize Standing Water:* Within desertscrub habitat (generally from the west end of the project to Davidson Canyon), water applied to dirt roads and maintenance areas for dust abatement shall use the minimal amount needed to meet safety and air quality standards, to prevent the formation of puddles, which could attract desert tortoises and other wildlife to work sites. The Biological Monitor shall patrol these areas to ensure water does not puddle and shall take appropriate action to reduce water application where necessary.
 - k) *Speed limit:* To minimize potential impacts to desert tortoise and other wildlife, no vehicles will be permitted to exceed 25 mph while traveling on access roads.
 - l) *Pima Pineapple Cactus:* Implementation of the following conservation measures are required in order to minimize project related impacts to PPC, vegetation, and PPC habitat:
 - i) *Fencing:* The Biological Monitor will install temporary fencing will be placed around all PPC located within the project work areas to provide increased visibility and protection during project activities. All fencing will be removed following completion of the project. Fencing will be a minimum of a 20-foot diameter around the PPC.
 - ii) *Monitoring:* A Biological Monitor will be present during project activities. Should additional PPC be located during the project, avoidance and fencing will be implemented and, if necessary, an alternate access route will be selected.
 - iii) *Avoid spreading/introducing invasive plant species:* Western will wash all off-road vehicles and maintenance equipment before entering public lands at Western's storage facility. Western will inspect and clean all vehicles and equipment removing dirt and plant parts from equipment when leaving each pole replacement work site.
 - iv) *Reconstruction:* Ground disturbance areas will be returned to pre-construction contours to minimize erosion.
- 3) CULTURAL RESOURCES
- a) *Cultural Awareness and Monitoring:*
 - i) No work will be performed between structures 2-5 to 4-1A and 6-4 to 7-6 until consultation with interested parties is complete and Western Environmental has issued internal NTP for these areas. This internal NTP will be drafted in consultation with interested parties and contain special stipulations and operating procedures that will ensure no adverse effect results from project implementation.
 - ii) No other sensitive archaeological areas were identified as a result of the cultural resource inventory. However, consultation with the State Historic Preservation Office and tribal entities is ongoing; should these parties identify any historic properties or other concerns Western will properly address them prior to project implementation.
 - b) In the event of archaeological discoveries or discoveries of human remains during ground-disturbing activities, these activities must cease in the immediate vicinity of the discovery and

Western's archaeologist (602-605-2842) must be notified immediately. If human remains are found on federal lands, the federal land-managing agency must also be notified immediately, followed by written notification of the discovery of human remains to the agency with 24 hours. Western's archaeologist, and the federal land managing agency's archaeologist, will consult with the Arizona SHPO and tribes to determine the appropriate course of action.

Table 1. Wood Pole Structures Identified for Replacement

0-2	4-1A	8-2	15-1	18-7	26-1	35-2	46-1	54-4	61-8
0-7	4-2	9-3	15-2	19-1	26-2	35-4	46-2	54-5	62-5
0-8	5-2	9-5	15-3	19-2	26-3	36-1	46-4	54-7	63-2
1-6	5-4	9-9	15-8	20-1	26-4	36-5	49-1	55-5	63-3
2-1	5-5	12-3	16-1	22-3	26-7	36-6	49-8	55-8	64-2
2-6	5-6	12-4	16-2	22-4	27-4	39-7	50-3	56-2	64-3
2-7	5-7	13-2	16-5	22-6	28-3	42-7	50-5	56-3	67-7
3-1	6-1	13-6	17-1	23-3	28-5	43-2	50-6	56-8	68-3
3-2	6-2	14-1	17-3	23-4	29-6	43-3	50-8	57-2	70-4
3-3	6-2A	14-2	17-4	23-5	30-1	43-6	52-4	57-4	76-6
3-4	6-3	14-3	17-6	23-6	31-6	44-1	52-6	58-5	78-1
3-5	6-5	14-4	18-3	24-3	32-4	44-4	53-4	58-8	78-5
3-6	7-3	14-5	18-4	24-6	33-3	45-1	53-7	59-6	78-6
3-7	7-4	14-6	18-5	25-1	34-1	45-5	53-8	59-7	79-4
4-1	8-1	14-7	18-6	25-2	34-4	45-6	54-3	61-6	

Poles in **BOLD** are within range of the Pima pineapple cactus

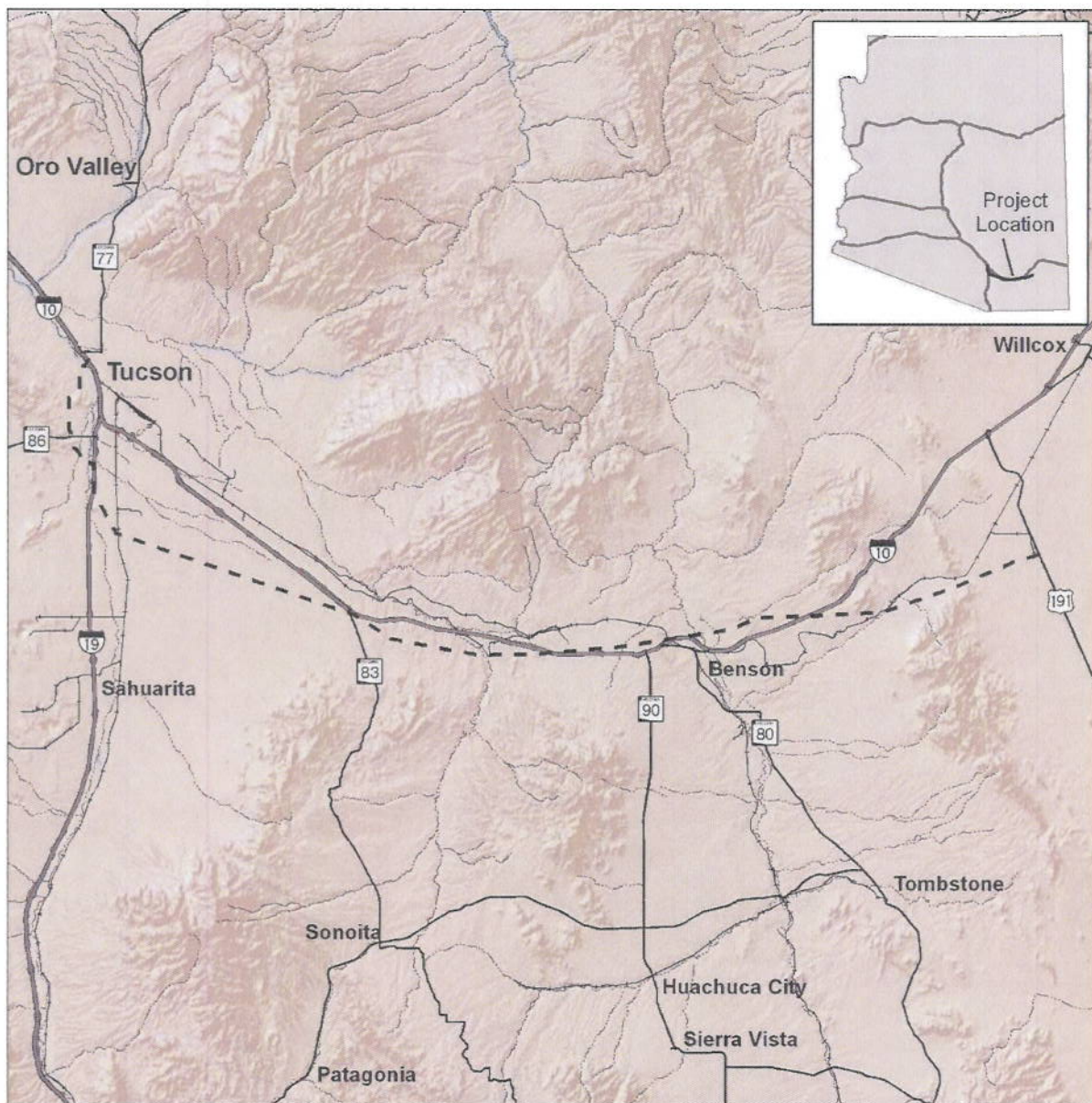
Table 2. Road Segments Identified for Improvement

2-5 to 4-1A	53-9 to 54-2
19-2 to 19-6	55-6 to 56-7
23-7 to 24-1	Between 58-4 and 58-5
26-7 to 28-6	59-5 to 62-2
31-5	West of 68-3
38-6	73-1 to 73-5
44-7 to 44-8	74-7 to US 191
45-4 to Mescal Road	
47-1 to 49-1	
49-5 to 50-3	
50-6 to 51-1	
51-2 to 52-7	

Checklist for Categorical Exclusion Determination, revised Nov. 2011

Application of Categorical Exclusions (1021.410)	Disagree	Agree	Unknown
(b)(1) The proposal fits within a class of actions that is listed in appendix A or B to subpart D.		X	
(b)(2) There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal, including, but not limited to, scientific controversy about the environmental effects of the proposal; uncertain effects or effects involving unique or unknown risks; and unresolved conflicts concerning alternate uses of available resources		X	
(b)(3) The proposal has not been segmented to meet the definition of a categorical exclusion. Segmentation can occur when a proposal is broken down into small parts in order to avoid the appearance of significance of the total action. The scope of a proposal must include the consideration of connected and cumulative actions, that is, the proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or § 1021.211 of this part concerning limitations on actions during EIS preparation.		X	
B. Conditions that are Integral Elements of the Classes of Actions in Appendix B. :	NO	YES	UNKNOWN
(1) Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety and health, or similar requirements of DOE or Executive Orders.	X		
(2) Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities;	X		
(3) Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases;	X		
(4) Have the potential to cause significant impacts on environmentally sensitive resources. An environmentally sensitive resource is typically a resource that has been identified as needing protection through Executive Order, statute, or regulation by Federal, state, or local government, or a federally recognized Indian tribe. An action may be categorically excluded if, although sensitive resources are present, the action would not have the potential to cause significant impacts on those resources (such as construction of a building with its foundation well above a sole-source aquifer or upland surface soil removal on a site that has wetlands). Environmentally sensitive	X		

resources include, but are not limited to:			
(i)	Property (such as sites, buildings, structures, and objects) of historic, archaeological, or architectural significance designated by a Federal, state, or local government, or property determined to be eligible for listing on the National Register of Historic Places;	X	
(ii)	Federally-listed threatened or endangered species or their habitat (including critical habitat) or Federally- proposed or candidate species or their habitat (Endangered Species Act); state-listed or state-proposed endangered or threatened species or their habitat; Federally-protected marine mammals and Essential Fish Habitat (Marine Mammal Protection Act; Magnuson-Stevens Fishery Conservation and Management Act); and otherwise Federally-protected species (such as under the Bald and Golden Eagle Protection Act or the Migratory Bird Treaty Act);	X	
(iii)	Floodplains and wetlands (as defined in 10 CFR 1022.4, —Compliance with Floodplain and Wetland Environmental Review Requirements: “Definitions,” or its successor);	X	
(iv)	Areas having a special designation such as Federally- and state-designated wilderness areas, national parks, national monuments, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, scenic areas (such as National Scenic and Historic Trails or National Scenic Areas), and marine sanctuaries;	X	
(v)	Prime or unique farmland, or other farmland of statewide or local importance, as defined at 7 CFR 658.2(a), —Farmland Protection Policy Act: Definitions, or its successor;	X	
(vi)	Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region); and	X	
(vii)	Tundra, coral reefs, or rain forests.; or	X	
(5)	Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.	X	



Key

--- • Transmission line

Miles
0 7.5 15



Figure 1. Project location map